

Applicant : Nancy Carrasco, Ge Dai and Orlie Levy  
Serial No. : 09/995,007  
Filed : November 26, 2001  
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#### Remarks

Claims 1-55 were pending in this case. With the above amendment, claims 1-55 were cancelled without prejudice or disclaimer and claims 56-75 were entered and are now pending. The new claims are supported in the specification at least at page 5, lines 24-29; page 10, line 25 - page 12, line 25; page 16, lines 4-15; and page 17, line 24- page 18, line 26.

#### Sequence Listing Compliance

Applicants enclose herewith a sequence listing that was submitted in the parent case, U.S. Patent Application No. 08/595,553, to which this application is a continuation. In accordance with 37 C.F.R. 1.821(e), applicants request that a copy of the sequence listing in computer readable form in case 09/595,553 be used herewith. The information recorded in computer readable form is identical to the paper copy of the sequence listing.

#### Small Entity Status

Applicants claim small entity status for this application.

#### Fee Payment

A check for \$490 is enclosed herewith, based on the following calculation: basic filing fee of \$370 plus late filing fee of \$65 plus \$55 for one month extension of time = \$490. If further payment is required to maintain pendency of this application, use of Deposit Account 01-1785 is authorized. Overpayments may also be credited to Deposit Account 01-1785.

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Conclusion

Please enter the amendments provided above and examine the amended claims.  
If there are any minor issues that would prevent examination, applicants request that the  
Patent Office contact the undersigned attorney.

Respectfully submitted,

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April 29, 2002

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Specification Amendment and Claims After Preliminary Amendment  
U.S. Patent Application No. 09/995,007  
Additions are underlined. All claims are new.

SPECIFICATION AMENDMENT:

The paragraph at page 7, lines 1-15 to read as follows:

Figure 2 represents complementary nucleotide and deduced amino acid sequences of the rat sodium/iodide symporter cDNA (SEQ ID NO:1 and SEQ ID NO:2, respectively). Nucleotides are numbered in the 5' to 3' direction beginning with the first base of the cloned cDNA. Untranslated sequences are in lower case and translated sequences in upper case letters. The deduced amino acid sequence (single letter code) is shown below the nucleotide sequence. The twelve putative membrane-spanning domains are shaded in grey. Three potential N-linked glycosylation sites are indicated in bold type (positions 225, 485 and 497). One putative intracellular consensus sequence for cAMP-dependent protein kinase A phosphorylation is boxed (positions 549-552). A polyadenylation signal in the 3' untranslated domain is underlined (position 2795).

CLAIMS AFTER AMENDMENT:

56. (New) A method of detecting expression of a mammalian sodium/iodide symporter in a mammalian tissue, the method comprising contacting nucleic acid from the mammalian tissue with a nucleic acid probe which can hybridize to a portion of the nucleotide sequence contained in Figure 2 (SEQ ID NO:1).

57. (New) The method of claim 56, wherein the nucleic acid from the mammalian tissue is mRNA.

58. (New) The method of claim 56, wherein the nucleic acid from the mammalian tissue is mRNA made into cDNA.

59. (New) The method of claim 56, wherein the mammalian tissue is non-thyroid tissue.

60. (New) The method of claim 56, wherein the nucleic acid probe further comprises a label.

61. (New) The method of claim 60, wherein the label is selected from the group consisting of a radioactive label, biotin, and a fluorescent probe.

62. (New) The method of claim 56, wherein the tissue is a human tissue.

63. (New) A method for detecting a mammalian sodium/iodide symporter in a sample, the method comprising contacting the sample with an antibody that is immunoreactive with the mammalian sodium/iodide symporter and determining whether the antibody bound to a mammalian sodium/iodide symporter.

64. (New) The method of claim 63, wherein the antibody is a polyclonal antibody.

65. (New) The method of claim 63, wherein the antibody is a monoclonal antibody.

66. (New) The method of claim 63, wherein the antibody is labeled.

67. (New) The method of claim 63, wherein the sample is a mammalian tissue.

68. (New) The method of claim 67, wherein the mammalian tissue is thyroid tissue.

69. (New) The method of claim 67, wherein the mammalian tissue is non-thyroid tissue.

70. (New) The method of claim 67, wherein the mammalian tissue is human tissue.

71. (New) A method of identifying an iodide transport protein from non-thyroid tissue, the method comprising contacting nucleic acid from the non-thyroid tissue with a nucleic acid probe which can hybridize to a portion of the nucleotide sequence contained in Figure 2 (SEQ ID NO:1) and detecting hybridization thereof.

72. (New) The method of claim 71, wherein the nucleic acid from the non-thyroid tissue is mRNA.

73. (New) The method of claim 71, wherein the nucleic acid from the mammalian tissue is mRNA made into cDNA.

74. (New) The method of claim 71, wherein the nucleic acid probe further comprises a label.

75. (New) The method of claim 74, wherein the label is selected from the group consisting of a radioactive label, biotin, and a fluorescent molecule.